



## Vascular Disease

### PERIPHERAL VASCULAR DISEASE PREVALENCE INCREASES DRAMATICALLY WITH ADVANCED AGE: A POPULATION DATABASE OF OVER 3.6 MILLION PEOPLE

ACC Moderated Poster Contributions  
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**Background:** Peripheral vascular disease (PVD) is associated with significant morbidity and mortality. Prior population studies have failed to assess the prevalence of different vascular phenotypes in the very elderly.

**Methods:** Over 3.6 million participants from 2003-2008 who completed a medical and lifestyle questionnaire in the United States were evaluated by ultrasound imaging for internal carotid artery >50% stenosis (CAS) and abdominal aortic aneurysm >3cm (AAA). Peripheral artery disease (PAD) was defined by an ankle brachial index <0.9.

**Results:** Among subjects > 40 years of age, the prevalence of CAS, AAA, and PAD was 3.9%, 0.9%, and 3.6%, respectively. Prevalence of any vascular disease increased with age (40-50y: 2%; 51-60y: 3.5%; 61-70y: 6.9%; 71-80y: 12.5%; 81-90y: 20.7%; 91-100y: 29.4%;  $P<0.0001$ ). Prevalence of disease in each vascular territory increased with age (Figure). After adjustment for sex, race/ethnicity, family history of cardiovascular disease, smoking, diabetes, hypertension, hypercholesterolemia, and exercise, the odds of CAS (OR 1.76, 95% CI 1.75-1.77), AAA (OR 2.19, 95% CI 2.16-2.21), and PAD (OR 1.96, 95% CI 1.95-1.97) increased with every decade of life.

**Conclusion:** There is a dramatic increase in the prevalence of CAS, AAA and PAD with advanced age. More than 20% and 25% of octo- and nonagenarians, respectively, have some form of PVD. Further research should examine the potential benefit of screening and treatment of PVD in appropriately aged populations.

#### Prevalence of PAD, AAA, and CAS Stratified by Decade of Life

